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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------|------------------------|
| 10/734,774 | 12/12/2003 | Douglas Heintzman | AUS920030915US1 | 1889 |
| 46240 | 7590 | 11/28/2007 | | |
| IBM CORPORATION (WMA) C/O WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042 | | | EXAMINER LEE, PING | |
| | | | ART UNIT 2615 | PAPER NUMBER |
| | | | MAIL DATE 11/28/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-----------------|------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/734,774 | HEINTZMAN ET AL. | |
| | Examiner | Art Unit | |
| | Ping Lee | 2615 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 10, 13, 29-31 and 36-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 10, 13, 29-31, 36-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1, 10, 13, 36 and 42-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly amended claims 1, 13 and 42 specify "data associated with an audio profile and a device profile". This newly added limitation is not supported by the specification and the drawings as originally filed. On p. 14, lines 9-16, it is clearly stated that the audio profile includes a user profile and a device profile. On p. 16, lines 14-22, the audio profile is also defined including a device profile and a user profile. Based on these disclosures, one skilled in the art would have expected the device profile is a part of the audio profile. The amended claims imply that they are separate units. The current invention as disclosed cannot have audio profile and device profile as two independent units simultaneously. Therefore, the amended claims 1, 13 and 42 and their corresponding dependent claims introduce new matter.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 13, 29, 30, 38 and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Rader et al (hereafter Rader) (US 6,944,474).

Regarding claims 1, 13, 29, 30, 38 and 39, Rader discloses a method and a corresponding apparatus comprising:

receiving data indicative of acoustic conditions proximate to an audio presentation device (mobile phone) (102 in Fig. 1);

authenticating a user identification (col. 7, lines 43-44);

receiving data associated with an audio profile (100 or 101) and a device profile (920 in Fig. 10) associated with the authenticated user identification (col. 7, lines 38-45);
and

determining acoustic data to be provided based on at least a portion of the received data indicative of acoustic conditions proximate to the audio presentation device, at least a portion of the device profile, and at least a portion of the data associated with the audio profile (105) and the device profile.

On col. 2, lines 63-64, Rader shows that receiving the data indicative of acoustic conditions proximate to the audio presentation device comprises receiving the data from at least one acoustic detector deployed proximate to the audio presentation device.

On col. 3, lines 10-14, Rader shows that receiving the data indicative of acoustic concision proximate to the audio presentation device comprises providing an acoustic test signal.

4. Claims 29, 30, 38, 39 and 42-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Lemelson et al (hereafter Lemelson) (US 7,110,951).

Regarding claims 29 and 38, Lemelson discloses a method and a corresponding apparatus, comprising:

receiving data indicative of acoustic conditions proximate to an audio presentation device (TV) (24 in Fig. 2);
receiving data indicative of a detected acoustic test signal (user's response);
receiving data associated with at least one audio profile (26); and
determining acoustic data to be provided based on at least a portion of the received data indicative of acoustic conditions proximate to the audio presentation device, at least a portion of the data indicative of a detected acoustic test signal (user's response), and at least a portion of the data associated with the at least one audio profile (by 14).

Regarding claims 30 and 39, Lemelson shows that the test signal is provided (col. 5, lines 24-30).

Regarding claims 42, 44 and 45, Lemelson further shows the step of receiving data (by 14) associated with an audio profile (from 26) and a device profile (from 28, 30 or 32).

Regarding claim 43, Lemelson discloses the capability, a characteristic, or a capability and a characteristic of a display device (col. 11, lines 26-51).

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 10, 13, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson.

Regarding claims 1, 10, 13, 36 and 37, Lemelson fails to show that the user's identification is being authenticated. Lemelson teaches that the hearing test could be performed locally and the hearing profile can be stored and recalled later. Since the television as disclosed in Lemelson is shared by a plurality of users, someone other than the user can access the hearing profile if there is no restriction on who can recall the hearing profile. User B might accidentally erase/modify the hearing file of User A. Examiner takes Official Notice that this feature is notoriously well known in the art. Thus, it would have been obvious to one of ordinary skill in the art to modify Lemelson by providing some kind of protection, such as authenticating the user, to prevent other people from accidentally erase/modify the hearing profile, or simply for privacy reason.

7. Claims 31 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Feezor et al (hereafter Feezor) (US 3,808,354).

Regarding claims 31 and 40, Lemelson fails to show receiving a portion of the acoustic test signal from an acoustic detector. Feezor teaches that it is important to measure the acoustic test signal at the testing location in order to determine whether the testing result is valid. Thus, it would have been obvious to one of ordinary skill in the art to modify Lemelson in view of Feezor by receiving the acoustic test signal in order to validate the hearing test result.

8. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Feezor as applied to claim 40 above, and further in view of Hotvet (US 5,550,923).

Regarding claim 41, Lemelson teaches how to use adaptive filter to obtain the optimal filter coefficient to cancel noise and enhance the speech; however, it fails to clearly discuss the signal-to-noise ratio is being used for enhancing the speech. Hotvet teaches how to use the SNR to determine the optimal hearing. Thus, it would have been obvious to one of ordinary skill in the art to further modify Lemelson and Feezor in view of Hotvet by utilizing the SNR in combination with the adaptive filter in order to enhance the speech intelligibility.

9. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Rader.

Regarding claim 46, Lemelson fails to show that the processor-based device is located remotely from the audio presentation device. Lemelson's device is located with the television. Rader teaches that the processor could be located remotely from the audio presentation device, so the processor could be shared by a plurality of users and audio presentation devices, and the audio presentation devices could be made with less cost and size. Thus, it would have been obvious to one of ordinary skill in the art to modify Lemelson in view of Rader by using a remotely located processor to process the hearing profile and ambient noise condition and so on in order to reduce the cost of the television and its size as well.

Response to Arguments

10. Applicant's arguments filed 10/31/07 have been fully considered but they are not persuasive.

On p. 8, applicant argued that Rader fails to show the step of authenticating user identification. Examiner disagrees. Rader discloses a mobile device with the capability for allowing the user to request the transfer a **personal** hearing profile from a remote site to the mobile phone. The keyword here is "personal". One skilled in the art, after reading Rader, would have expected that the personal data should be accessed only by the user or other authorized personnel, just like a patient at a doctor's office. The user has to enter a PIN, so the system can transfer the correct data over to the mobile phone. The word "authenticate", by Webster's Ninth New Collegiate Dictionary, means to confirm. The PIN disclosed in Rader has to be confirmed by the remote site to approve the request of transferring hearing profile. For example, if the user enter an incorrect PIN, would the remote site transfer someone else data? or if not data at all? One skilled in the art would have expected that the PIN as disclosed in Rader is a safeguard to prevent the information leaking to other non-authorized person. If following applicant's argument that PIN is only for identification purpose, such as those provided by soldiers, the name of the user should be the best identification. Everyone will remember his/her own name, so will his/her acquaintance. A user might forget his/her PIN, but most likely will not forget his/her own name. The purpose of having PIN is to prevent anyone else besides the user to have the access to the hearing profile. A

PIN is usually given only to the user. The PIN confirms that it is the user who wants to data. Therefore, Rader discloses the claimed invention.

On p. 11, applicant argued that user does not "detect" the test signal, so Lemelson fails to disclose the claimed invention. The word "detect" means, by the same dictionary, to determine the presence. If a user hears a sound, the user determines the presence of the particular sound. Therefore, it is proper as indicated in the office action that Lemelson discloses the claimed invention.

On p. 11, applicant argued that Lemelson fails to show a device profile. This is not persuasive. First of all, the amended claim 42 introduces new matter and is being rejected under 112, 1st paragraph above. Secondly, claim 42 states that "receiving data associated with an audio profiled and a device profile". Both applicant and examiner agreed that elements 28, 30 and 32 are a part of device profile, so any data from any of 28, 30 and 32 reads on the data associated with a device profile.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

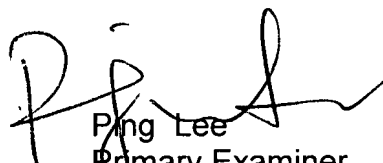
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 571-272-7522. The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Ping Lee
Primary Examiner
Art Unit 2615

pwl